WHAT IS CLAIMED IS:

1. A system comprising:

in a vehicle suspension having an actuator, a clamp circuit powered by movement of the actuator to generate a passive damping characteristic of the actuator.

2. The system of claim 1 in which the actuator has a coil assembly, the clamp circuit including a switch for electrically connecting the coil assembly.

3. The system of claim 2 in which the coil assembly is a multiple-phase coil assembly, the switch electrically connecting one or more coil ends to change the passive damping characteristic of the actuator.

4. The system of claim 2 in which the switch is a silicon device.

5. The system of claim 4 in which the clamp circuit includes a rectifier and the switch is a single unidirectional switch.

6. The system of claim 1 in which the actuator includes an armature and a stator, the movement of the actuator generating a back electromotive force (EMF) as a result of the armature moving relative to the stator within the actuator, the back EMF powering the clamp circuit.

7. The system of claim 6 in which the back EMF is boosted by a supplemental circuit.

8. The system of claim 7 in which the supplemental circuit comprises a bipolar Royer oscillator capable of operating at an input voltage of approximately 0.5 volts.

9. The system of claim 1 in which the clamp circuit is enabled during vehicle startup and shutdown.

10. The system of claim 1 in which the clamp circuit is enabled when a failure is detected.

11. The system of claim 1 in which the clamp circuit is pulsed to change the passive damping characteristic of the actuator.

12. A system comprising:

in a vehicle suspension system having an actuator, an active clamp function provided by power-switching devices for the actuator; and

a clamp circuit powered by a motion of the actuator.

13. The system of claim 12 in which the actuator has a multiple-phase coil assembly, the clamp circuit including a switch for electrically connecting one or more coil ends to change a passive damping characteristic of the actuator.

14. The system of claim 13 in which the switch is a silicon device.

15. The system of claim 14 in which the clamp circuit includes a rectifier and the switch is a single unidirectional switch.

16. The system of claim 12 in which the clamp circuit is enabled during a vehicle startup and shutdown.

17. The system of claim 12 in which the clamp circuit is enabled when a failure is detected.

18. The system of claim 12 in which the clamp circuit is pulsed to change the passive damping characteristic of the actuator.

19. A vehicle suspension system comprising:

an electronic controller adapted to produce an actuator control signal; and

an actuator adapted to receive electrical power from an external power source and to produce a controlled force in response to the actuator control signal produced by the electronic controller, the actuator comprising a clamp circuit engageable by power generated within the actuator by movement of the actuator itself to generate a passive damping characteristic of the actuator.

20. The system of claim 19 in which the actuator has a coil assembly, the clamp circuit including a switch for electrically connecting the coil assembly.

21. The system of claim 20 in which the coil assembly is a multiple-phase coil assembly, the switch electrically connecting one or more coil ends to change the passive damping characteristic of the actuator.

22. The system of claim 20 in which a movement of the actuator generates an electromotive force (EMF) to operate the switch adapted to receive the electromotive force to maintain electrical connection between windings.

23. The system of claim 20 in which the switch is a silicon device.

24. The system of claim 23 in which the clamp circuit includes a rectifier and the switch is a single unidirectional switch.

25. The system of claim 19 in which the clamp circuit is pulsed to change the passive damping characteristic of the actuator.

26. A method comprising:

in a vehicle suspension having an actuator, generating a passive damping characteristic of the actuator by movement of an actuator.

27. The method of claim 26 in which the actuator has a coil assembly, the clamp circuit including a switch for electrically connecting the coil assembly.

28. The method of claim 27 in which the coil assembly is a multiple-phase coil assembly, the switch electrically connecting one or more coil ends to change the passive damping characteristic of the actuator.

29. The method of claim 27 in which the switch is a silicon device.

30. The method of claim 29 in which the clamp circuit includes a rectifier and the switch is a single unidirectional switch.

31. The method of claim 26 in which the actuator includes an armature and a stator, the movement of the actuator generating a back electromotive force (EMF) as a result of the armature moving relative to the stator within the actuator, which powers the clamp circuit.

32. The method of claim 31 in which the back EMF is boosted by a supplemental circuit.

33. The method of claim 32 in which the supplemental circuit includes a bipolar Royer oscillator capable of operating at an input voltage approximately 0.5 volts.

34. The method of claim 26 in which the clamp circuit is enabled during a vehicle startup and shutdown.

35. The method of claim 26 in which the clamp circuit is enabled when a failure is detected.

36. The method of claim 26 in which the actuator is powered by a power electronics module that further provides an active clamp to the actuator.

37. The method of claim 36 in which the active clamp and the clamp circuit are simultaneously enabled when a failure is detected or during a vehicle shutdown.

38. The method of claim 36 in which the active clamp is enabled and the clamp circuit is disabled sequentially during a vehicle startup.

39. The method of claim 36 in which the clamp circuit and the active clamp are sequentially disabled when switching back from failure to normal operation mode.

40. The method of claim 36 in which a clamp circuit status signal is fed to the power electronics module to inhibit the power electronics module from switching when the clamp circuit is enabled.

41. The method of claim 26 in which the clamp circuit is pulsed to change the passive damping characteristic of the actuator.

42. A system comprising:

in a vehicle suspension system having an actuator, an active clamp function provided by power-switching devices for the actuator; and

a clamp circuit powered by a power source.

43. The system of claim 42 in which the actuator includes a multiple-phase coil assembly, the clamp circuit comprising a switch for electrically connecting one or more coil ends to change a passive damping characteristic of the actuator.

44. The system of claim 43 in which the power source is a battery.

45. The system of claim 43 in which the power source is a large valued capacitor.

46. The system of claim 42 in which the clamp circuit is pulsed to change a passive damping characteristic of the actuator.

47. A system comprising:

an actuator including a clamp circuit, the clamp circuit powered by movement of the actuator to clamp a coil assembly of the actuator.

48. The system of claim 47 in which the clamp circuit includes a switch for electrically connecting the coil assembly.

49. The system of claim 48 in which the coil assembly is a multiple-phase coil assembly, the switch electrically connecting one or more coils to change a damping characteristic of the actuator.

50. The system of claim 47 in which the clamp circuit is pulsed to change a passive damping characteristic of the actuator.

51. The system of claim 48 in which the switch is a silicon device.

52. The system of claim 51 in which the clamp circuit includes a rectifier and the switch is a single unidirectional switch.

53. The system of claim 47 in which the actuator includes an armature and a stator, movement of the actuator generating a back electromotive force (EMF) as a result of the armature moving relative to the stator within the actuator, the back EMF powering the clamp circuit.

54. The system of claim 53 in which the back EMF is boosted by a supplemental circuit.

55. The system of claim 47 in which the actuator motor is a linear motor.

56. The system of claim 47 in which the actuator motor is a rotary motor.